What is claimed is:

- 1. A device for controlling a drive unit, in particular of an internal combustion engine in a vehicle, having at least one sensor and at least one actuator as well as a controller, the device containing at least two processors, wherein at least one program memory which contains program code is assigned to each of the at least two processors, and the program code in the at least two program memories is identical.
 - 2. The device according to Claim 1, wherein the at least one sensor is connected to a first processor, and the at least one actuator is connected to the first processor or to at least one second processor, the processors also being connected.
 - 3. The device according to Claim 1, wherein at least two sensors and at least two actuators are provided, and each sensor and each actuator is assigned to one processor and the program memory assigned to it.
 - 4. A control unit for controlling a drive unit, in particular of an internal combustion engine in a vehicle, which contains two processors, wherein at least one program memory which contains program code is assigned to each of the at least two processors, and the program code in the at least two program memories is identical.
 - 5. A method of controlling a drive unit, in particular of an internal combustion engine in a vehicle, at least one performance quantity of the drive unit being determined, and as a function of the performance quantity, at least one actuator of the drive unit being controlled according to predefinable or selectable functionalities using controlled variables; in at least one controller, at least two processors processing the possible functionalities, and the functionalities being predefined by program code in at least one program memory assigned to each processor, wherein the

possible functionalities per processor and the program codes in the program memories assigned to the processors are identical.

- 6. The method according to Claim 5, wherein the at least one performance quantity is processed in a first processor, and the at least one actuator is controlled with at least one controlled variable from the first processor or from at least one second processor, the processors exchanging information.
- 7. The method according to Claim 5, wherein a distinction is made between performance quantities of the first type and of the second type, the performance quantities of the first type being processed in the functionalities of both processors, and the performance quantities of the second type being processed only in the functionalities of one processor.
- 8. The method according to Claim 5 or 7, wherein a distinction is made between controlled variables of the first type and controlled variables of the second type, the controlled variables of the first type being formed by the functionalities of a first processor from the performance quantities which are processed in the functionalities of a first processor, and the controlled variables of the second type being formed by the functionalities of the first processor from the performance quantities which are processed in the functionalities of a second processor, and the functionalities of the at least two processors exchanging information.

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